

The Relationship between Teachers' Knowledge, Attitude and Belief with the Implementation of Inquiry-Based Learning in Zhengzhou, China

ABSTRACT

This study investigates the level of teachers' knowledge towards the nature of science (NOS), attitude and belief towards inquiry teaching, and the implementation of inquiry-based learning (IBL); the difference of the implementation of IBL based on teachers' years of experience; and the relationship between teachers' knowledge on NOS, attitude and belief towards inquiry teaching with the implementation of IBL. The quantitative research methodology has been used to complete this study. The sample involved is 728 in-service primary science teachers in China. They are asked to answer a questionnaire which consists of four sections. The items measuring teachers' knowledge on NOS, teachers' attitude towards inquiry teaching and the implementation of IBL are adopted from previous studies with the permission of the respective author; whereas, the items measuring teachers' belief towards inquiry teaching has been adapted from another study to meet with the research objectives. The descriptive and inferential statistics have been used to analyse the data. The findings show that the level of teachers' knowledge on NOS, teachers' attitude and belief towards inquiry teaching, and the implementation of IBL are at the medium level; there is no significant difference in the implementation of IBL according to the teachers' years of experience; and, there are significant relationship between teachers' knowledge on NOS, attitude and belief towards inquiry teaching with the implementation of IBL. These findings implicate that teachers' knowledge, attitude and belief are the three main predictors for the implementation of IBL in the teaching of science in primary schools in China.-